

2011 Operating Margins Tender Information Report

Introduction

This market report is for the 2011 Operating Margins (OM) tender for the storage year 2011/12. It is produced after the tender and is designed to give existing and potential OM participants an overall view of the tendered utilisation and availability prices; together with further detail on the type, size and characteristics of the tendered offers.

This report is structured into three sections. The following provides an overview of each section.

Section 1: The Operating Margins Requirement

This section gives details of the Operating Margins requirement.

Section 2: Tender Details – Number, Type & Volume

This section gives details of the tender offers received and compares them to the requirement and National Grid's view of Industry capability to provide Operating Margins.

Section 3: Partial Regulated Pricing in place – Tendered Prices & Acceptances

In this section, the assessment assumes that National Grid LNG Storage is under a regulated price structure for Operating Margins services for some requirement types. This section is representative of the current codes, licences and Safety Case and therefore reflects the offers we have accepted to meet the Operating Margins requirement.

For further information regarding this product or for how and when to tender, please consult the following OM section on National Grid's information website:

<http://www.nationalgrid.com/uk/Gas/OperationalInfo/GasOperatingMargins/>

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Section 1: The Operating Margins Requirement

The Operating Margins Requirements for the 2011 / 12 storage year are as follows:

NTS Zone	Volume (GWh)	Deliverability (GWh/d)
North	0	0
Scotland	43	68
Wales	0	0
West	117	88
South	46	92
Supply Loss	337	674
Orderly Rundown	470	470
Non-locational	98	98
Total Requirement	1,111	

Table 1: Operating Margins Requirement for the 2011/12 Storage Year

The Operating Margins Requirement is made up of different components, each of which must be able to be delivered within a short timescale. As the requirements are unlikely to be concurrent, though they could be consecutive, this can lead to bookings equivalent to over 24 hours of deliverability at a given facility in the lowest cost solution where a facility can deliver more than one component of the Operating Margins Requirement.

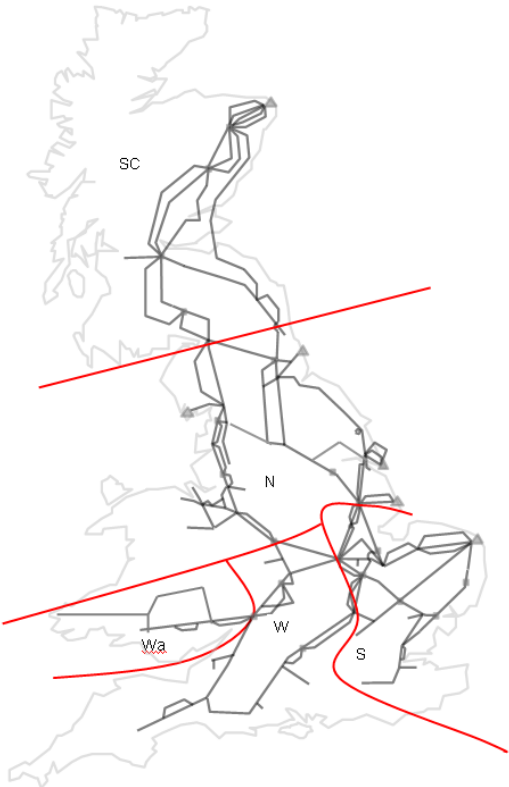


Figure 1: Map of Operating Margins Locational Zones

Section 2: Tender Details – Number, Type & Volume

National Grid received 18 offers for 1,549GWh of Operating Margins services for the storage year 2011/12.

For gas delivery arrangements, the tendered volume of OM gas is assumed to be equal to the maximum volume of OM that could be provided. This volume is calculated from the aggregate of the requirements that the tender offer can meet, subject to any tendered restrictions on the number or volume of utilisations.

Volume of Offers Received

The number of offers submitted for 2011/12 is illustrated below in Table 2. National Grid received 1,549GWh of offers for the Operating Margins services for the storage year 2011/12 against a total requirement of 1,111GWh. The volume of offers is shown below compared to the requirement volume, such that positive values show a surplus of offers compared to the requirement and negative values show a deficit of offers compared to the Operating Margins Requirement.

Requirement Type	Surplus / deficit to requirement of tender offers (GWh) (a)	Number of offers submitted (b)	Number of facilities where offers submitted (c)	Surplus / deficit to requirement of non-duplicated tender offers (GWh) (d)	Surplus / deficit to requirement of non-duplicated tender offers excluding NGLNG Storage (GWh) (e)
North	0	0	0	0	0
Scotland	-43	0	0	-43	-43
South	0	3	1	0	0
West	-91	3	2	-103	-103
Supply Loss	-34	18	10	-124	-124
Orderly Rundown	403	13	6	309	309
Non-locational	846	18	10	740	740
Total Surplus or Deficit to Requirement	438	18	10	313	313

Table 2: Surplus & deficit of tender offers submitted relative to the 2011/12 OM Requirement by type

Column (a) shows the surplus (or deficit) of the total volume of tender offers compared to the total requirement for each operating margins requirement type. The requirement types that show a deficit of offers on this basis are the Supply Loss requirement, the Scotland Locational requirement and the West Locational requirement.

Column (b) shows the number of offers submitted that could potentially be used for each Operating Margins requirement type.

Column (c) shows the number of facilities where Operating Margins offers were submitted. Where the number of offers exceeds the number of facilities, more than one offer was received at a given facility.

The maximum volume of offers that can be accepted for OM at a facility is governed by the characteristics of the facility concerned, independent of the number of tendering parties at the facility. Column (d) shows the surplus (or deficit) of the volume of tender offers restricted to the facility maxima for each Operating Margins requirement type. The Scotland Locational, West Locational and Supply Loss requirements show a deficit of offers on this basis as shown in figure 2 below:

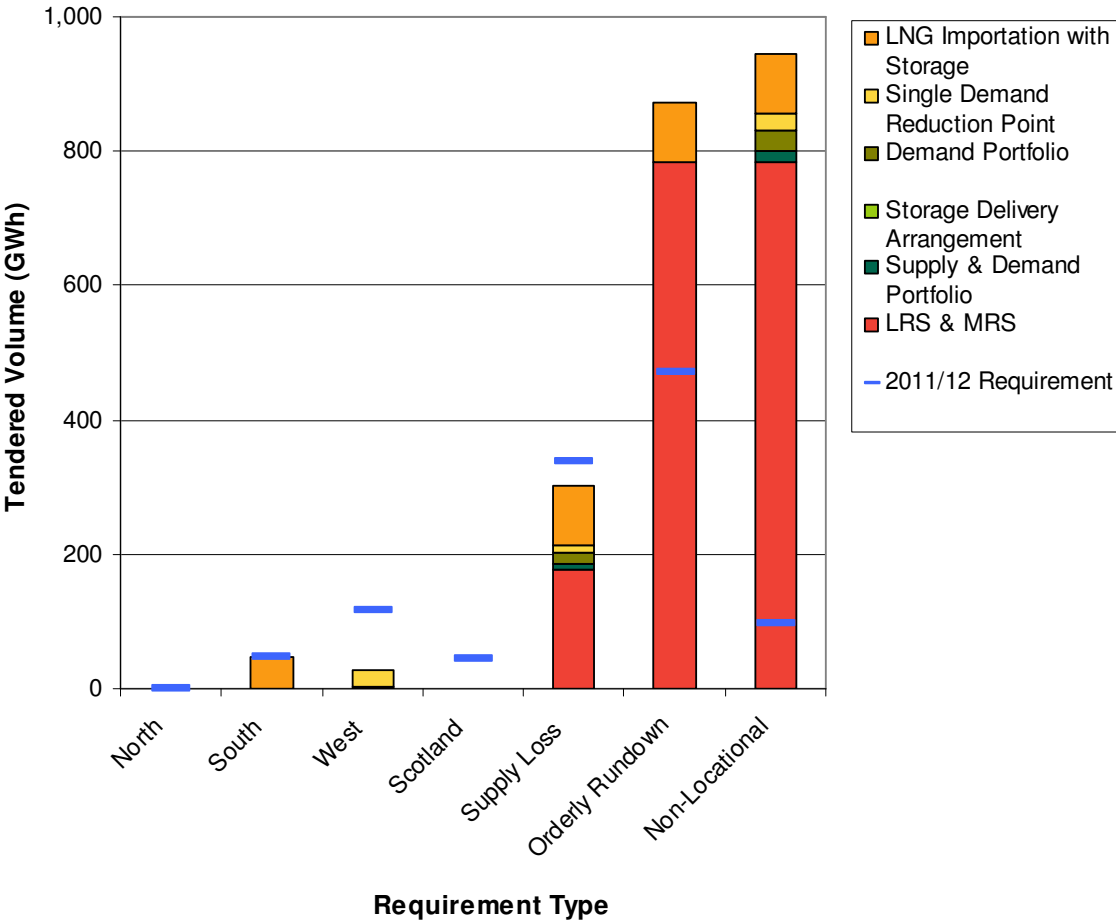


Figure 2: Requirement and tendered volume by requirement type for storage year 2011/12.

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Column (e) shows the surplus (or deficit) of the total volume of tender offers for each Operating Margins Requirement type excluding offers from NGLNG Storage. This is calculated on the basis of using facility maxima as in Column (d). The requirement types that show a deficit of offers on this basis are the Scotland Locational, West Locational and Supply Loss requirements.

The volume of offers calculated above is in line with the latest industry code and safety case, which enable gas held in storage, supply increase and offtake reduction as sources of Operating Margins services.

Types of Offers Received

As shown below in Figure 3, there has been an increase in the total volume of tender offers received through the Operating Margins service tender process when compared to last year. There has been an increase in MRS – Storage Capacity offers and in the number and volume of offers from Single Demand Reduction Points and LNG Importation with Storage. There has, however been a decrease in the number and volume of SRS – Storage Capacity offers.

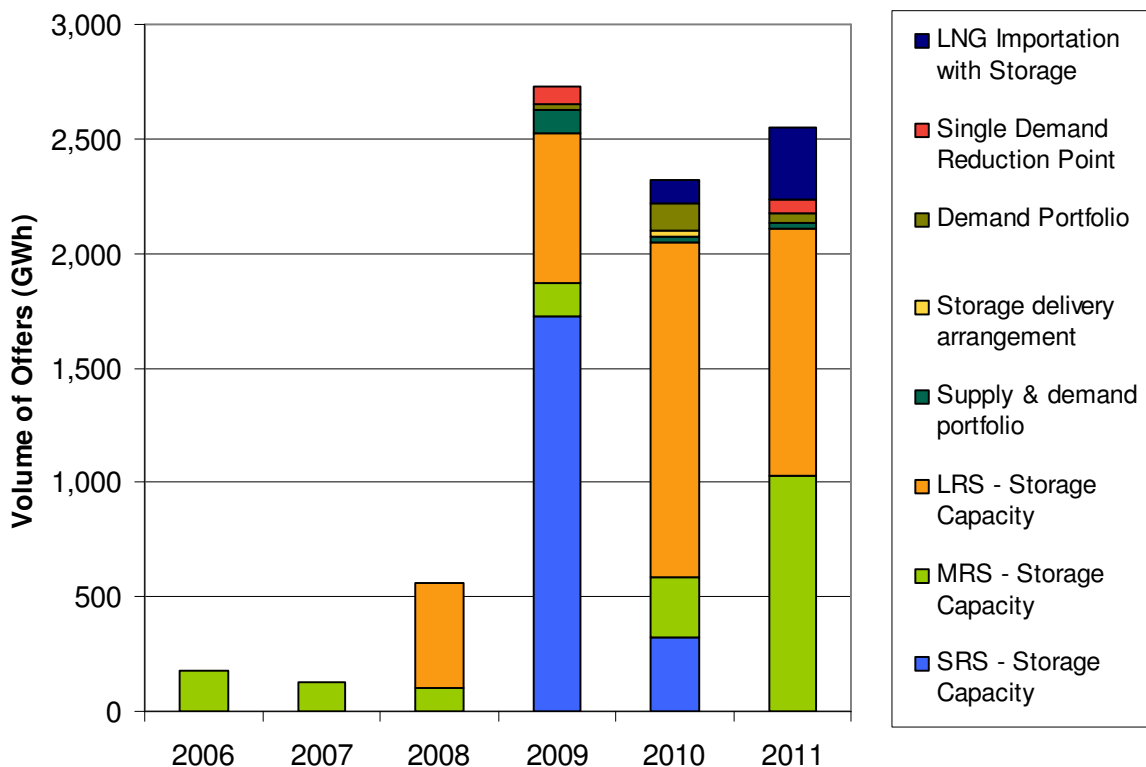


Figure 3: Volume of tender offers at annual tenders from each provider type for storage years 2006-2011

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For 2011/12 more delivery arrangement offers were received than capacity arrangement offers. The split between the different types of providers is shown below in Figures 4a and 4b.

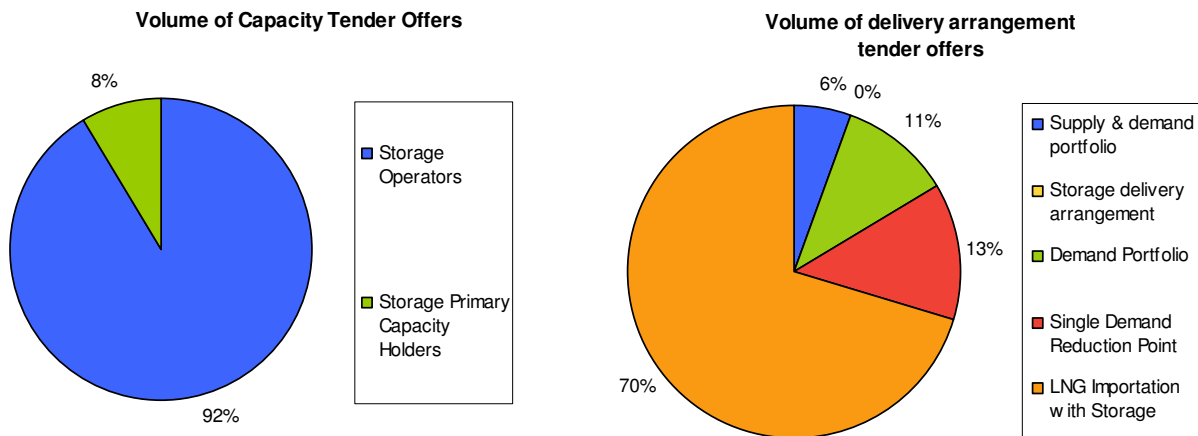


Fig 4a: Volume of capacity tender offers by type

Fig 4b: Volume of delivery tender offers by type

Potential for Service Provision compared to offers received

Both the requirement and market for Operating Margins provision is not homogeneous as a result of facility, network, and supply and demand characteristics. As a result, the provision of Operating Margins is subject to a number of constraints and a varied level of competition for each requirement type, as shown in Table 2 and in more detail below.

The Operating Margins capability of a facility is dependent on the facility characteristics (such as the response time, volume of gas and deliverability¹ available) and the type of facility.

The type of facility is a factor in the volume of OM that can be provided. For example, in an emergency, when Orderly Rundown Operating Margins would be required, it is assumed supplies would already be at maximum capacity and demands would be reducing their offtake, therefore these service provision types cannot provide the Orderly Rundown part of the requirement.

Similarly, supply sources, including storage, may also be limited in their ability to provide OM to cover the supply loss requirement depending on supply assumptions for the site (e.g. if a storage site is forecast to predominately flow at its full rate then no capability would be considered against OM supply loss). Demand reduction sources are limited to being able to provide OM when the facility is offtaking demand from the NTS.

¹ The rate at which gas can be delivered to the NTS is the potential deliverability of the site.

For each Operating Margins requirement type, there is a chart showing the tendered volume of Operating Margins by facility type for the past two storage years. There is also a chart of the Potential Service Provision³ and tendered volume of Operating Margins for 2011/12.

The tendered quantity in each of the following charts is the minimum of the tendered volume (space for storage or number & volume of utilisations for delivery contracts) and capability of the facility. If a facility can fulfil more than one type of requirement (as is often the case), the total quantity that could be accepted may be constrained by the tendered volume.

Of the facilities that provide OM, only National Grid LNG Storage facilities are subject to pre-emption rights such that Operating Margins bookings have priority over other commercial bookings of capacity.

³ Potential Service Provision is a National Grid assumed theoretical maximum capability. The data used to produce these charts includes assumptions of the demands and supplies forecast to flow on the NTS. The OM capability of a facility is calculated to be the volume of OM that National Grid assumes a facility could provide. For new service providers, deliverability is only considered to be available, once a sustained period of actual deliverability is demonstrated.

Group 1: Supply Loss & Demand Forecasting

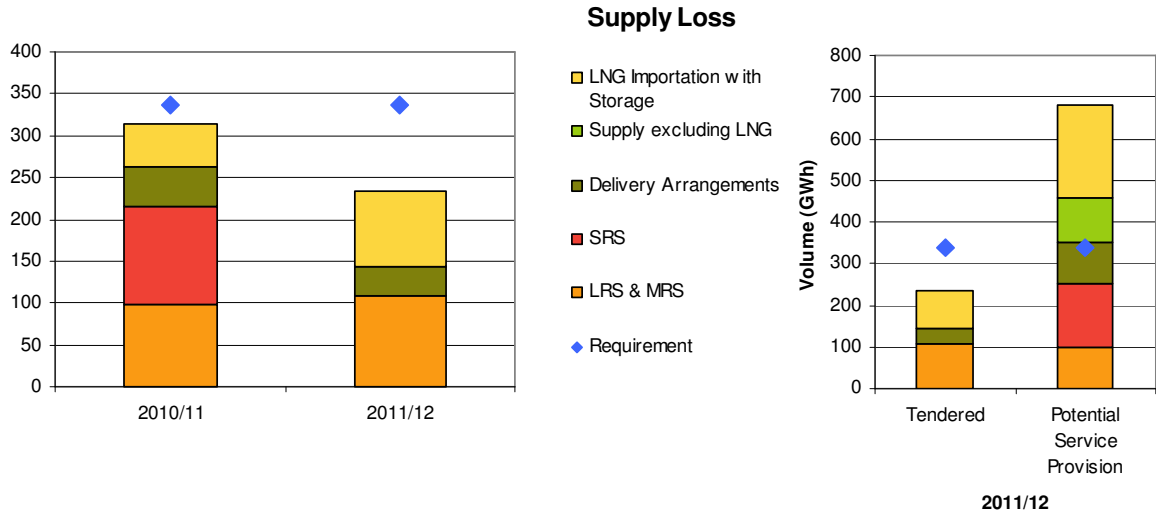
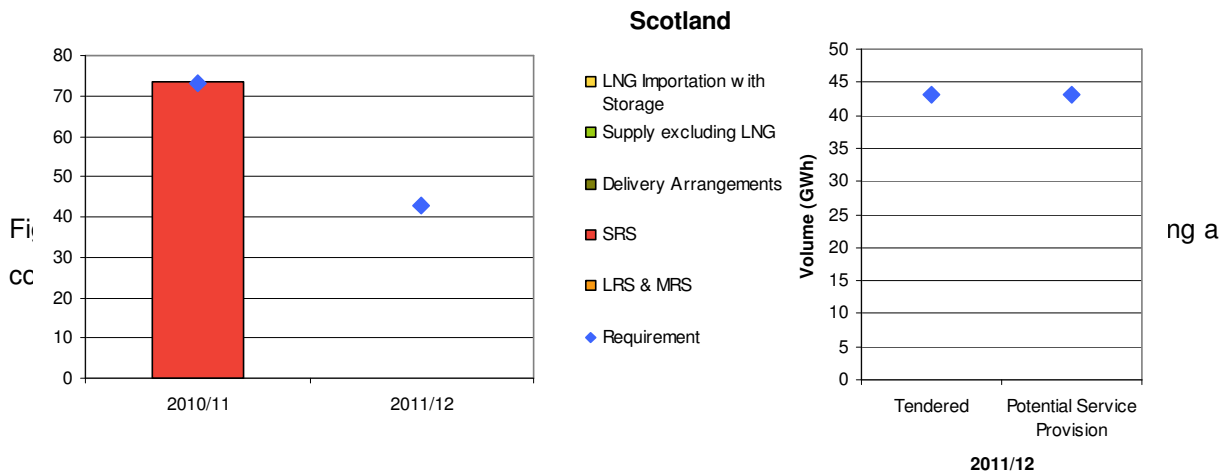


Figure 5.1: Group 1 capability of potential OM facilities by type including a comparison to tendered volumes in 2010/11

The graph shows that the current market of providers have enough capability to provide the Group 1 Supply Loss and Demand Forecasting requirement, however the volume tendered was insufficient to fulfil the requirement for 2011/12.

Group 2: Locational – Scotland



There are currently no storage facilities available to provide Operating Margins in the Scotland zone.

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Group 2: Locational – South

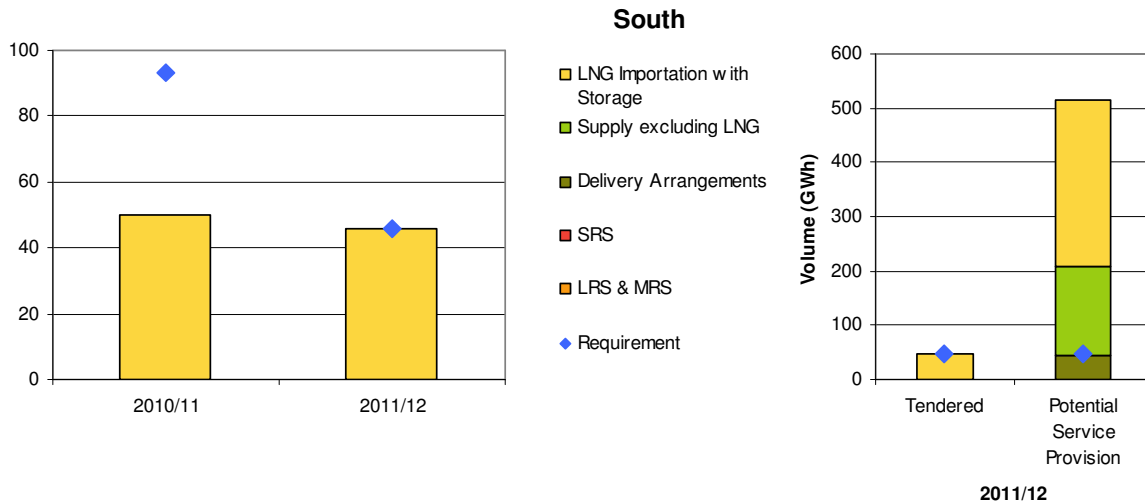


Figure 5.4: Group 2: Locational - South zone capability of potential OM facilities by type including a comparison to tendered volumes

Currently only providers from an LNG Importation with Storage site have tendered to provide Operating Margins in the South zone, other provider types (in green) could also provide Operating Margins in the future.

Group 2: Locational – West

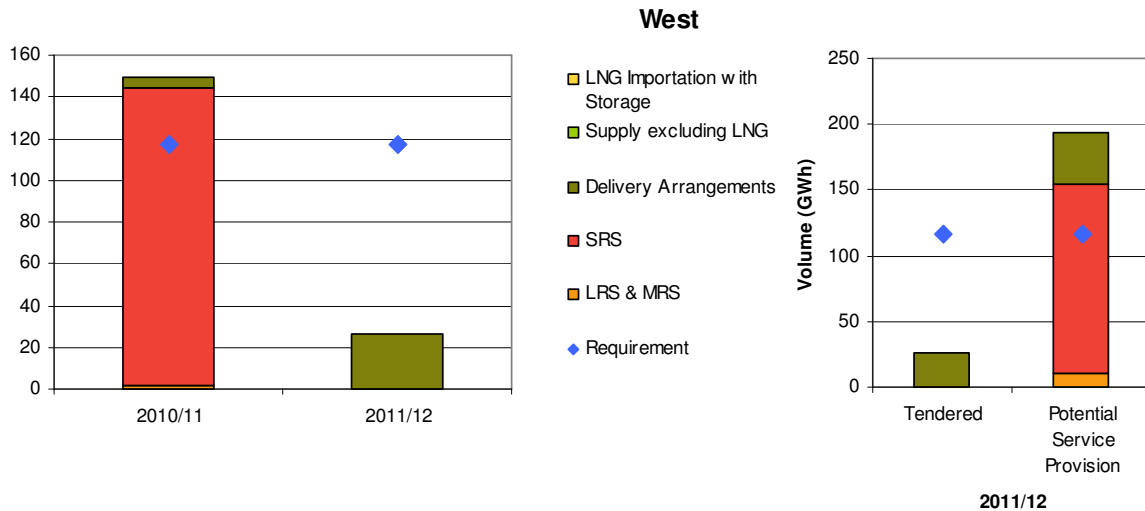


Figure 5.5: Group 2: Locational - West zone capability of potential OM facilities by type including a comparison to tendered volumes

The West locational zone has Short Range Storage and Medium Range Storage facilities that are able to provide Operating Margins. Other provider types can also offer OM services, but alone could not fulfil the requirement.

Group 2: Non-locational

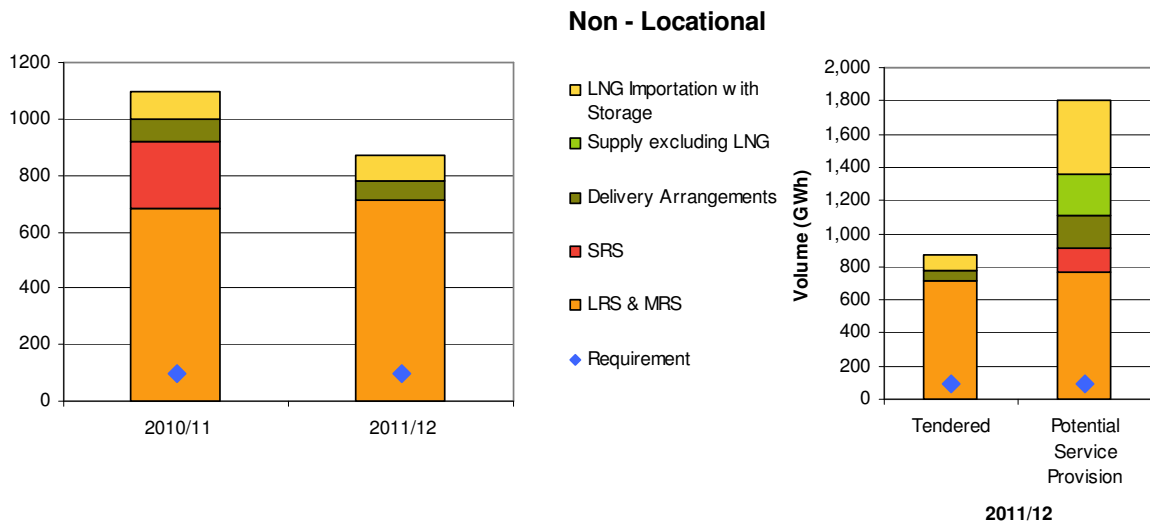


Figure 5.6: Group 2: Non-locational capability of potential OM facilities by type including a comparison to tendered volumes

There is a wide range of tendering providers of non-locational OM to fulfil the requirement.

Group 3: Orderly Rundown

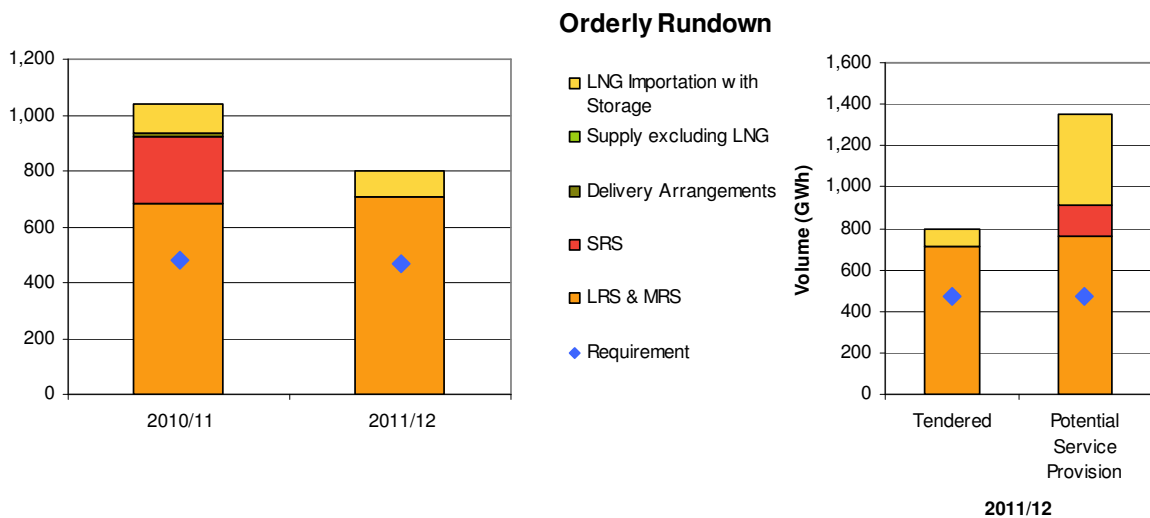


Figure 5.7: Group 3 capability of potential OM facilities by type including a comparison to tendered volumes

For the Orderly Rundown requirement, there is a range of tendering providers that are able to provide this service. The volume tendered was sufficient to fulfil the requirement. NTS Demand reduction and Supply increase providers are not able to fulfil this requirement as discussed earlier in this section.

Section 3: Partial Regulated Pricing in place – Tendered Prices & Acceptances

The assessment of the tender assumed that National Grid LNG Storage is under a regulated price structure for the provision of Operating Margins services at the prices set out in C3 of the Gas Transporter Licence in respect of the NTS for some requirement types. 784GWh of offers have been accepted for the Storage Year 2011/12. This section is representative of the current codes, licences and Safety Case and therefore reflects the offers we have accepted to meet the Operating Margins requirement.

The assessment of the tender offers through the tender was designed to find the lowest cost solution. The costs assessed include the holdings contract costs (e.g. space or deliverability contracts as tendered) as well as the estimated re-profiling, standby and utilisation costs. The pricing of a tender offer affects its place in the stack of offers and therefore the volumes and prices accepted at other facilities are influenced by the pricing of services at NGLNG Storage's facilities. Tables 8 and 9 show the offers tendered and accepted under the tender, not including OM services from NGLNG Storage booked through the UNC process at regulated prices.

Prior to the close of the tender, Ofgem was minded to suspend the C3 prices for the 2011/12 storage year if it judged competition to have been effective. The key criterion for assessing the effectiveness of the competition was whether National Grid could fulfil each OM requirement from providers other than NGLNG Storage.⁴

When the offers from NGLNG Storage were excluded from the tender, the Orderly rundown and Non-Locational OM requirements could still be fulfilled. Therefore, competition was deemed effective and C3 prices were suspended for these requirement types. Competition was not deemed effective in the provision of the Supply Loss, South, West and Scotland requirements, therefore C3 prices for these requirements will continue.

⁴<http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/LNGPriceControl/Documents1/OM%20decision.pdf>

Capacity Arrangements	Weighted Average Offer Price per unit of space (p/kWh)	0.61
	Minimum Offer Price per unit of space (p/kWh)	0.26
	Maximum Offer Price per unit of space (p/kWh)	1.57
Gas Delivery Arrangements	Weighted Average Offer Price per Unit of OM Gas available (p/kWh)	1.49
	Minimum Offer Price per Unit of OM Gas available (p/kWh)	0.70
	Maximum Offer Price per Unit of OM Gas available (p/kWh)	2.78
	Weighted Average Offer Price per unit of deliverability offered (p/kWh/day)	2.07
	Minimum Offer Price per Unit of deliverability offered (p/kWh/day)	1.53
	Maximum Offer Price per Unit of deliverability offered (p/kWh/day)	2.78

Table 8: Prices offered through the OM tender not including NGLNGS at regulated prices

Capacity Arrangements	Weighted Average Accepted Offer Price per unit of space (p/kWh)	0.40
	Minimum Accepted Offer Price per unit of space (p/kWh)	0.26
	Maximum Accepted Offer Price per unit of space (p/kWh)	1.52
Gas Delivery Arrangements	Weighted Average Offer Price per Unit of OM Gas available (p/kWh)	1.40
	Minimum Accepted Offer Price per Unit of OM Gas available (p/kWh)	0.70
	Maximum Accepted Offer Price per Unit of OM Gas available (p/kWh)	2.43
	Weighted Average Offer Price Accepted per unit of deliverability (p/kWh/day)	1.90
	Minimum Offer Price Accepted per Unit of deliverability (p/kWh/day)	1.53
	Maximum Offer Price Accepted per Unit of deliverability (p/kWh/day)	2.43

Table 9: Prices accepted through the OM tender not including NGLNGS at regulated prices

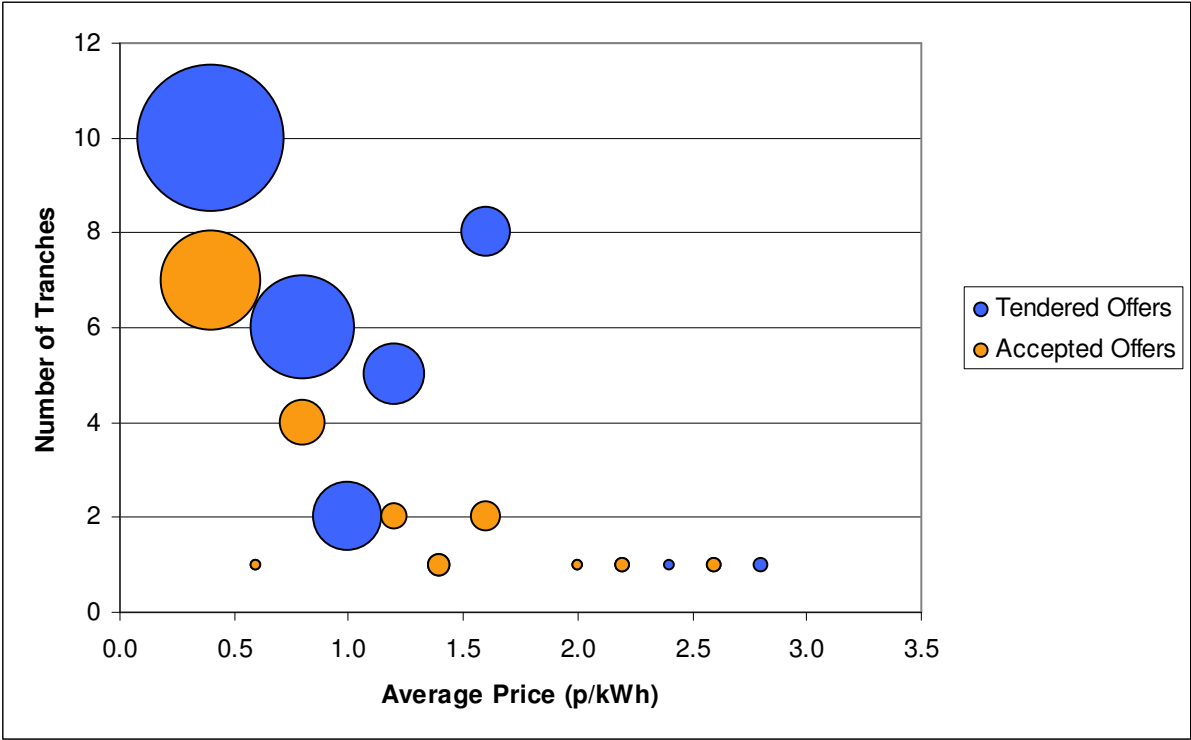


Figure 9: Prices offered through the OM tender

The volume of OM services that has been accepted through the tender for 2011/12 is less than the requirement, such that services were booked under regulated prices.

Appendix Terminology

Term	Definition
C3	Special Condition C3 “Restriction of Prices for LNG Storage Services” is a licence condition in National Grid Gas’ Gas Transporter Licence in respect of the NTS
GWh	Gigawatt hour – equivalent to one million kilowatt hours (kWh)
HSE	Health and Safety Executive
kWh	kilowatt hour
OM	Operating Margins. Operating Margins gas is used to maintain National Transmission System (NTS) pressures in the immediate period following operational stresses and before market balancing measures become effective.
NTS	National Transmission System
Storage Year	1 May to 30 April
UNC	Uniform Network Code